

DOCUMENT RESUME

ED 135 434

95

JC 770 163

AUTHOR Ugland, Richard; Duane, Gail
TITLE Serving Students with Specific Learning Disabilities in Higher Education--A Demonstration Project at Three Minnesota Community Colleges.
INSTITUTION Normandale Community Coll., Bloomington, Minn.
SPONS AGENCY Minnesota Higher Education Coordinating Commission, St. Paul.; Minnesota State Community Coll. Board, St. Paul.; Office of Education (DHEW), Washington, D.C.
PUB DATE Nov 76
NOTE 73p.; Project participants included Rochester Community College, Normandale Community College, and Metropolitan Community College
EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.
DESCRIPTORS Academic Achievement; Community Colleges; *Demonstration Projects; Educational Diagnosis; Guidance Services; Higher Education; *Junior Colleges; Junior College Students; *Learning Disabilities; Persistence; *Program Evaluation; *Special Services; Tutoring

ABSTRACT

This document describes and evaluates the final year of operation of a three-year demonstration project conducted at three Minnesota community colleges which sought to locate learning disabled students in the three colleges, identify their special learning problems, and aid them in succeeding in their academic programs. During 1975-76, the project served 150 college students and 77 individuals from the community, all of whom had some form of learning disability. Primary problems experienced by the learning disabled students were deficiencies in reading, writing, and spelling. Project services delivered to these students included routine diagnostic services, individual and group tutoring, instructor intervention, program guidance, job placement, and behavior management. Cost of these services was less than \$150 per student. Some improvement in the grade point averages of project students was seen, but wide variation in course completion rates between participants and non-participants were found for some academic disciplines. Recommendations for the design and administration of programs for learning disabled students in higher education are presented based on project outcomes. (JLS)

* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *

ED 135434

SERVING STUDENTS WITH SPECIFIC LEARNING DISABILITIES
IN HIGHER EDUCATION--A DEMONSTRATION
PROJECT AT THIRTEEN MINNESOTA
COMMUNITY COLLEGES

A Project Evaluation Report

Submitted By:

Richard Ugland, Ed.D.

Gail Duane, Project Consultant-Planner

Participating Colleges:

Rochester Community College,
Rochester, Minnesota
Normandale Community College
Bloomington, Minnesota
Metropolitan Community College
Minneapolis, Minnesota

November, 1976

ACKNOWLEDGEMENTS

This project would not have been possible without the support of the administration and faculty members of Normandale, Metropolitan and Rochester Community Colleges of the Minnesota State Community Colleges. Recognition is also given to the students who donated their time and unique expertise for the purpose of helping their fellow students.

SPONSORS

Title I, Higher Education Act, U. S. Department of Health,
Education and Welfare

Minnesota Higher Education Coordinating Board

Minnesota State Community College Board

Hustad Foundation, St. Paul, Minnesota

PROPOSAL DEVELOPMENT AND COORDINATION

Karen M. Hanson, Coordinator of Developmental
Studies and the Independent Learning Center
Normandale Community College

PROJECT ADMINISTRATION

Dr. Bernard J. Raphael, Associate Dean of Instruction

Dr. Manley Olson, Associate Dean of Instruction

Normandale Community College, 9700 France Avenue South,
Bloomington, Minnesota 55431

SERVING STUDENTS WITH SPECIFIC LEARNING DISABILITIES
IN HIGHER EDUCATION--A DEMONSTRATION
PROJECT AT THREE MINNESOTA
COMMUNITY COLLEGES

Project Evaluation Report

ABSTRACT

This program was developed to locate learning disabled students in three Minnesota community colleges, to identify their special learning problems, and to help them to succeed in their academic programs. The project arose from needs identified by individual workers and the presumption that significant numbers of SLD student identified in elementary and secondary schools were entering college where they would not find the supportive services and recognition which made it possible for many to complete high school.

The project was administered on a consortium model with a consultant-planner coordinating staff and services at the three participating Minnesota community colleges: Rochester, Normandale (Bloomington), and Metropolitan (Minneapolis). The project continued for three years with the program evaluation focusing on the final project year, 1975-76.

Staffing and service patterns varied greatly between institutions due to differences in student population, selection criteria, administrative policies, instructor interest, and patterns of existing school and community services. Project staffing at each school included an SLD

students were less than total student body differences between institutions. Wide variations in student course completion rates were found between academic units, pointing to a need for further analysis to determine the specific reasons for high non-completion rates in some units.

The evaluation and staff experience also resulted in recommendations that colleges and universities conduct need assessments for SLD programming; that they pattern programs to suit local needs and conditions; that they opt for local administration and supervision in large schools; and that they place greater emphasis upon community, student and faculty education. Early identification strategies were suggested during recruitment, screening and matriculation. Attention to the effect of institutional, departmental, and classroom procedures and practices on learning of disabled students was also suggested. In general, greater flexibility in these matters was seen as an important institutional and SLD program goal.

specialist with additional staffing primarily consisting of volunteer instructors and students.

Despite a substantial public and in-service education effort by project staff members and students, the evaluation indicated that a greater effort would have resulted in better instructor response to student needs and increased referrals. During the 1975-76 school year the project served 150 college students and 77 individuals referred from the community. Sixty-two percent of the college students were considered to have classic learning disabilities, another 38 percent having learning handicaps resulting from physical, emotional, speech or visual disabilities or cultural and language differences.

The primary problems identified were deficits in reading, writing and spelling. Many students also experienced intra-personal and inter-personal problems. Project services, in addition to routine diagnostic services, included individual and group tutoring, instructor intervention, program guidance, job placement and behavior management. Service patterns and intensity varied widely between students. The cost of project services was less than \$150 per student.

Students referred to the SLD program had, on the average, lower grades than students in general and were less successful in completing courses. Some improvement was seen in GPA's of project students during the time they participated in the SLD program. The amount of gain in GPA was related to the length of time students were active in the project. GPA differences between SLD and non-SLD

TABLE OF CONTENTS

PART I	Page
ABSTRACT	iii
STATEMENT OF THE PROBLEM	1
HISTORY OF THE MINNESOTA SLD PROGRAM	3
PROGRAM DESCRIPTION	4
Referral	5
Initial Response to Referral	7
Diagnostic Process and Techniques	8
Use of Diagnostic Information	9
Outcomes of Diagnostic Process	10
Prescription-Service Patterns	10
Basic Skills Tutoring	11
Course Content Tutoring	11
Consultation with Instructors	12
Social and Vocational Services	12
Materials	13
CONCLUSIONS AND RECOMMENDATIONS	15
Conclusions	15
Recommendations	17

TABLE OF CONTENTS

PART II	Page
ANALYSIS OF PROJECT RESULTS	20
Sources of Referral	21
Primary Disability Affecting Educability	23
Intellectual Patterns and Learning Deficiencies of Participants	23
Intelligence Test Results	23
Specific Learning Deficits Identified	25
Services Provided	27
Referral to Community Resources	30
Analysis of Changes in Grade-point Averages and Comparison of SLD Students with all Students	32
Fall and Spring GPA's of SLD Students	32
Relationships Between Extent of Program Involvement and GPA	33
SLD Students Compared with All Students	33
Variation in Course Completion Rates by Academic Department	35
A Comparison of SLD Students and Controls in Course Completion Rates	39
Instructor Suggestions and Awareness of the Program	39
Awareness of the Program	39
Knowledge of Specific Program Services	41
Instructor Optimism about SLD Student Success	42
Instructor Comments on Specific SLD Students	43
Suggestions for the SLD Program	43
SUMMARY	45
APPENDIXES	47

PART I

PROJECT DESCRIPTION AND DISCUSSION
OF CONCLUSIONS AND
RECOMMENDATIONS

STATEMENT OF THE PROBLEM

According to the most recent estimate from the Bureau of the Handicapped, Health Education and Welfare (HEW), there are now one million functionally non-literate adults in the United States. In August of 1968, HEW recognized that eight million children then in America's elementary and secondary schools would not learn to read normally. In the intervening eight years these eight million youth (one of seven American children in this age range) have become young adults. Many have enrolled in our post-secondary institutions, poorly equipped with the most basic skills in reading, writing, spelling and math.

Within the decade of the "60's," two factors have lead to increased enrollments of these students in such post-secondary institutions as the community colleges. First, the decision to reduce the cost barrier by increasing financial aid and creating more low-tuition institutions dedicated to providing resources for specific communities. Second, the waiver or removal of admission requirements such as high academic performance in high school and absolute cutting scores on standardized achievement tests (timed, written tests).

In order to cope with these non-traditional students, institutions have responded in two general forms. In the

first form, students are recruited and prepared for the transition to college by strengthening the college counseling, tutorial and other support services. In this form, it is the student who adapts to the institution's standards and learns to cope with traditional processes of teaching and learning.

Another alternative is for the institution to adapt its basic processes of teaching to the styles of learning most appropriate to the students it serves. Attempts to do so may incorporate counseling, tutoring and other services with an overall educational approach. The institution relies primarily upon altering the setting, the content and teaching methods rather than the learning style of the student.

Both approaches have been found necessary to produce successful learners. Both recognize the need for basic skills. Both also recognize that acquiring skills alone will not compensate for years of only marginal success in traditional learning environments. Students also need to learn how to learn. This involves not only improving skills but changing attitudes, aspirations and giving students a consistent experience of success over a period of time.

Instructors must frequently learn new teaching methods and responses to student's unique learning styles. Too often post-secondary instructors have taught academic subjects without fully recognizing their responsibility to help each student learn those subjects. In order to meet this need institutions have come to rely on support personnel, resource

instructors in basic skills and in-service training for instructors.

This project was designed to address the non-traditional students enrolling in our post-secondary schools diagnosed as having special learning disabilities.

HISTORY OF THE MINNESOTA SLD PROGRAM

The Minnesota Association for Children with Learning Disabilities (MACLD) and the Minnesota Division of Vocational Rehabilitation formed a task force in 1973 to examine the problems of SLD students in higher education in Minnesota. This task force generated the impetus for a pilot program for young adults with learning disabilities at the community college level. Subsequently, Karen Hanson found that a learning disabled student at Normandale Community College was able to succeed in college courses with supportive services (including taping books). The Coordinator of this project was experiencing similar success at Rochester Community College. Mary Lee Enfield brought the project director and Mrs. Hanson together in an effort to seek further community support for a pilot program. The Hustad Foundation of St. Paul funded a needs assessment in 1972-73 at Rochester and Normandale Colleges. In 1974 the Minnesota Higher Education Coordinating Committee funded an initial pilot program at Rochester, Normandale and Metropolitan (Minneapolis) colleges. The project was managed and executed

on a consortium model with project administrative responsibilities assigned to Normandale Community College.

Students were served through the 1974-75 school year. The project was continued through the 1975-76 school year with funding from Title I of the Higher Education Act. An evaluation and this report covering the final project year were funded by the Hustad Foundation.

During the terminal year services were extended to 150 students (Rochester - 92; Normandale - 22; Metropolitan - 36). In addition, the community service aspect of the program increased as more adults and young people sought remediation for their basic skill deficits. As a result of conferences, in-service and media presentations by staff and students, 77 students were referred or came on their own initiative from a three state area for diagnosis. This often resulted in recommendations to their home school district. Many of our community service students were from the southern section of Minnesota and the Iron Range, perhaps pointing to less well-developed services within those areas.

PROGRAM DESCRIPTION

The nature of the programs varied among institutions due to differing patterns of existing core educational programs and special services; varying service needs of the referred student populations, and varying philosophies and commitment of administrators in each institution. The program

process at all schools included three major phases: referral, diagnosis, and prescription-service.

Referral

The project was designed to serve enrolled or prospective students of the three participating colleges as a primary target population. However, many other students came independently or were referred for assistance. The project staff considered it their professional responsibility to provide staff contact time and some diagnostic services to these "community service" referrals as they might otherwise fail to receive appropriate consideration or service in their home school or community. Several students were self-referred from other four year colleges or universities including the University of Minnesota, Hamline University and Macalester College, suggesting the SLD students in those schools do not now have contact persons or special services to deal with their unique problems.

The three colleges developed uniform guidelines for selection of project students as follows:

1. Students who have completed high school or foreclosed the possibility to return to high school without project intervention.
2. Individuals who are average or above in relevant areas of intellectual ability.
3. Individuals who depart from normal (compared with their peers) in one or more significant areas of learning

or basic communication skills. Basic skills such as:

- A. Reading
- B. Writing
- C. Spelling
- D. Oral expression
- E. Math

4. Students who can reasonably be expected to benefit from the program. In some cases, a trial service period would be necessary in order to make this determination.
5. Candidates who are not self-referred must demonstrate a willingness to explore the program services and participate to the minimum extent of undergoing diagnostic services.
6. Individuals who might be expected (based on history or project staff judgement) to be significantly disruptive of the programs or progress of other SLD students will not be accepted.

Students of the participating schools were admitted when they met these accepted criteria for a functional diagnosis of learning disability. As the above criteria suggest, there was evidence that they not only showed specific basic skill or learning deficits but there was evidence that they were at a college level in some areas of intellectual capability. Students were not served unless there was some evidence to indicate that they would have as strong a chance of succeeding as other classes of students or individual students who were also accepted by the participating college.

Some students served in each college did not present classical learning disabilities (dyslexia) but were learning handicapped due to other disabilities including brain damage, emotional illness, visual and hearing deficits, physical disabilities, behavior disorders, and cultural and language differences. These students were seen for diagnostic purposes and provided intervention or supportive services until appropriate referral could be made to other services within or outside of the school or until they could function independently. Students who did not have a learning disability or learning-handicapping disability were screened from the program. Detailed information describing the population served is presented in the Results section of this report (Part II). No data was systematically collected on students who were denied services.

Initial response to referral. After receiving a referral or inquiry, a preliminary information sheet was completed to make an initial determination of the need for further diagnostic services (see Appendix A). At this point some students were referred to outside resources including counseling programs, welfare agencies, financial aid advisors, remedial reading programs, DVR, mental health centers or to individual instructors or advisors (see Part II, page 11). Those considered potentially eligible for direct project services were scheduled for further diagnostic services at the college.

Diagnostic Process and Techniques

Students were diagnosed by the Learning Disability Specialist at Normandale, by the Consultant-Planner at Rochester, and at Metropolitan by the Consultant-Planner with the assistance of graduate students and program master tutors (SLD) students who had received in-service training under supervision of both the Consultant-Planner and graduate students). Each student was individually assessed in five major areas (1) basic skills (reading, spelling, handwriting, math, composition, comprehension, conceptualization), (2) study skills (time management, test-taking skills, listening, note taking, concentration, etc.), (3) cognitive style (frustration tolerance, distractability, impulsivity, reaction to stress), (4) emotional stability, and (5) academic and vocational goals. Some students also received a psychometric assessment administered by a consulting psychologist.

In general, assessments examined both reception (i.e., reading and listening) and expression or performance (i.e., writing and speaking). Students' abilities and disabilities were identified and relevant information (including available medical, psychological, cultural and past educational backgrounds) included in their profile.

Diagnostic tests were not available during fall quarter. Many tests were developed by the Consultant-Planner as needs arose in the areas of sequencing, the use of figurative language, seeing relationships between words and classification and sorting of information for storage and retrieval relative

to the tasks at hand. Needs also arose to ascertain students' auditory skills for holding and retaining information. to determine if they could utilize tape recorders to gain meanings from lectures or courses. A list of diagnostic instruments used in the project and sample copies (where available and not copyrighted) are included in this report as Appendix B.

All assessment procedures and outcomes were discussed with the student in order to develop the individual's understanding of their unique problems and strengths and to help them not only cope with these differences but develop alternative coping strategies within their institution.

Use of diagnostic information. Assessments were shared with referral personnel, instructors, counselors, parents and significant others as the need arose. Clients often requested such sharing. All assessment information was considered confidential. Students were encouraged to openly utilize their assessment information to modify both their own behavior and their environment to better meet their unique needs (i.e., a highly distractable student was encouraged to seek examinations scheduled in a quiet area, a slow examination taker for extra time and a non-reader for oral exams). Students were also expected to use such information to help them ascertain which instructional style and instructor would be most compatible with their learning pattern.

Information given back to students and referral sources was structured to give practical information about their current level of progress. Grade levels were not used because of the limited functional value of basic skills grade scores in assisting individual students in higher education. Grade-level information was also considered likely to result in prejudice and unduly low expectations from instructors while intimidating or embarrassing students. The notion that college students need basic skills equal to the average student at their level in order to succeed is a common misconception.

Outcomes of diagnostic process. Diagnostic information was shared with the student and with all persons who would be active in a student's program. All were invited to contribute to planning and sequencing the students service pattern. In the case of students who were not to continue in the SLD project, diagnostic and prescriptive information was communicated to relevant personnel in outside agencies or institutions, as well as to the student.

Prescription-Service Patterns

The nature, intensity and sequence of services provided to project students was extremely varied. Part II of this report includes data on the frequency with which specific types of service were provided. Some comments concerning typical service patterns and the specific nature of some primary services will be offered here.

Basic skills tutoring. Individual and small group tutoring was provided at all three schools. SLD Specialists provided this service at Normandale and Metropolitan. Basic Skills tutoring at Rochester was provided by the project Consultant-Planner, graduate students, student tutors, college instructors and other volunteers. Multi-sensory techniques were stressed in reading and spelling, such as the Orton Gillingham approach. Instruction and review of basic skills was always available from student-tutors or fellow project participants, as well as staff members. The project results indicate that tutors have benefitted as much as learners from these relationships, as the tutors' academic outcomes were better than SLD project students in general.

Course content tutoring. Tutoring in course content was available through the same modes as basic skills tutoring, though classroom instructors and student volunteers were much more active in this area. The strategies employed included: structuring the body of information to be learned (based upon task and student analysis); compensatory training techniques (such as taping of texts and tests); and, less often, imparting specific information and main ideas. Tutors often acted as liaison persons between students and their instructors to assist in translations and to improve direct communication.

Consultation with Instructors. Informing instructors about the effects of learning disabilities and specific students' unique problems and strengths was a primary program service. There was a great deal of variability in responsiveness, ranging from great enthusiasm and flexibility to suspicion and anxiety about the effects on school standards of serving SLD students. Suspicions about unethical behavior on the part of one or two students lead some instructors to reject the SLD students and the project as a whole. (See Instructor-survey analysis in Part II of this report.)

In the view of the project staff members, the majority of instructors responded favorably to individual prescriptions for learning and teaching. Several have suggested that experience with the SLD program has improved their general effectiveness as instructors. Most instructors now have the expectation that SLD students can succeed in their courses, given some supportive services.

The primary tangible modification resulting from consultation with instructors was development or utilization of alternative teaching or testing materials and strategies. Assistance was available from project staff and volunteers in developing these alternatives, when necessary.

Social and vocational services. Existing programs and services of the colleges and the community were most often used to deal with social and vocational problems. Outside resources which were often used included: the State Division

of Vocational Rehabilitation, community rehabilitation facilities, community recreational programs and activity groups, and formal workshops on such themes as assertiveness or transactional analysis. Within-school resources included career planning groups, counseling services, student organizations and interest groups. Project students also formed social groups of their own from time to time to discuss their unique concerns and to provide support for each other. These groups tended to emphasize assertiveness, taking responsibility, and social participation (without direct encouragement from project staff members).

Vocational evaluation and counseling were not provided consistently by project staff members. Original project objectives were apparently too ambitious in this regard. Outcome or change data in this area were not collected as had been originally planned. Nonetheless, several students were worked with intensively to develop more realistic vocational goals, to locate and follow through on job tryouts or short-term employment, or to take advantage of existing vocational guidance and placement services.

Materials. Few materials were available at the beginning of the year and supply money was not available until the end of spring quarter. Students were therefore most often requested to make their own materials or materials which would be helpful to others. Materials were gathered from other educational agencies and purchased by staff from school budgets. Programmed materials were more heavily

stressed at some schools but were used minimally by project students. Most programmed materials used required instructor intervention and restructuring in order to be usable by project students. The SLD instructor often guided the student to materials off campus appropriate to their needs, i.e. grade school history, science or health texts to get general background information and to be able to restructure the students texts.

CONCLUSIONS AND RECOMMENDATIONS

Most of the conclusions and recommendations which follow are based upon data reported and analyzed in Part II of the project report. Some are based upon the project consultant-planner's direct experience with the programs in the three participating colleges from the planning stage through three program years.

Conclusions

1. Most students were self-referred, or referred by friends, relatives, secondary schools, or by community agencies.
2. The most common functional problems found among project students were deficiencies in reading, writing, math and spelling.
3. Students selected for program attention based upon diagnosis of functional limitations were as intelligent as other junior college students though they showed gaps in intellectual functioning characteristic of dyslexic individuals.
4. The overall GPA of SLD students was lower than that of students in general, but the difference was not as great as differences found between schools.
5. The services most often seen as needed by SLD students were diagnosis, program guidance, instructor intervention, consultation with family members or community

agencies, individual and group tutoring, and behavior management.

6. Some students who have severely limited reading ability are able to make normal progress in college when receiving special assistance as provided through this project.

7. The average grade point average of SLD students increased during their involvement in the program, the amount of improvement being positively related to the length of time they were involved.

8. Some SLD students will not be helped through traditional services if professional assistance is not available or effective in reducing severe emotional problems.

9. Most instructors were optimistic about the capacity of SLD students to succeed in their courses if they were receiving supportive services.

10. Most instructors responding to survey believe the program should be expanded.

11. The potential number of students needing SLD project services may have been much greater than actual referrals received as most instructors were not as knowledgeable about project services as they would like to have been.

12. The total service potential of an SLD program in higher education can be greatly expanded, with little additional cost, through the use of peer tutors, instructor consultation and involvement, and the full use of existing community resources.

13. SLD students in higher education can be provided supportive services at a cost which is not prohibitive (less than \$150 per student during the final project year).

14. The consortium approach to the management of SLD programming may not be necessary or practical with large institutions or where great variability between program models is desirable.

Recommendations

1. Institutions of higher education should conduct needs assessments to identify their learning disabled candidates and students, and to determine their special service needs.

2. College recruitment literature and other publicity should include information about SLD services available and appropriate contact persons.

3. Colleges and universities should develop procedures for diagnosis of learning disabilities at the point of application or entrance to permit early referral for special services.

4. Community agencies and relevant organizations and individuals should be represented on planning and/or steering committees for SLD programs in higher education.

5. In planning programs such as this, operating agreements covering cross-referral procedures, sharing of services, and communication techniques should be developed early with community agencies and programs.

6. SLD program strategies and structure should be designed with consideration of the particular institution's student population, existing support services, and available community resources.

7. More resources and time should be devoted to informing the public, students and instructors about project services than was done in this experimental program.

8. In-service education of instructors should be expanded and should deal with attitudes as well as information.

9. Special attention should be given to the course completion pattern of SLD college students. Specific policies and practices of a department should be examined when students experience relatively low course completion rates in that area.

10. Repetition of this type of project should provide for follow-up and information collection on students not accepted for services and students who do not follow through on their program.

PART II

PRESENTATION AND ANALYSIS OF DATA CONCERNING
SLD PROJECT STUDENTS, SERVICES,
AND OUTCOMES

ANALYSIS OF PROJECT RESULTS

The Special Learning Disabilities Project was very complex in design and execution. The variations between schools in interaction between the project and on-going programs, student populations, staff involvement, and many other factors resulted in service patterns which cannot be simply characterized. Program activities and structure were also not stable over time due to changes and improvements in project administration and internal procedures. While these factors can be seen as evidence of adaptation based upon experience in an innovative program, they confound the observer who may be looking for clear and convincing evidence on which to base future plans and decisions.

Nonetheless, it was possible to collect a substantial amount of data which may provide some baselines for planning and evaluating similar programs in the future. The data presented and discussed in this section is the basis for the conclusions and recommendations summarized in Part I of this report.

Much information was retrieved from the master data charts in students' files (See Appendix A). These "entry charts" were used to collect information from initial referral through program completion. Information concerning course completion and GPA's was obtained from transcripts, with control groups selected from each school population. Other sources of information are discussed in context in the "results" section which follows.

Sources of Referral

Early project planning concentrated public information efforts on community agency personnel and college instructors and counselors. Table 1 showing the actual sources of referral of participants indicates that a broader public information program was necessary.

TABLE 1

Sources of Referral of Project Participants*

Source	Rochester	Normandale	Metropolitan	Total
	N = 167	N = 42	N = 93	
Friends of Student	28	2	17	47
College Instructors	29	9	8	46
Self	23	9	12	44
Relative	22	3	17	42
Educational Agency	16	3	13	38
College Counselor	21	8	3	32
Corrections	8	0	6	14
Vo-Tech	5	0	5	10
Remedial Programs	6	0	3	9
Other	9	2	9	20
			TOTAL	302

* Data on referral sources covers the last two program years.

Forty percent of the program participants were referred by friends (16%), relatives (14%), or were self-referred (15%). Efforts were made during the third project year to get information to students in the schools through classroom presentations by project participants. It was again evident that the SLD student is often not identified by classroom teachers, though teachers and counselors were responsible for 26% of all referrals. The value of information dissemination outside of the institution is reflected in the finding that 24% of the in-college students were referred by community agencies such as secondary schools, corrections, vocational-technical schools and community remedial projects.

There were similar patterns of referral in the three schools with respect to enrolled students. However, the sources of referral of participants who were not enrolled in the college were quite different in each program. This appears to be due in part to variations in the availability of SLD services in each community.

The effectiveness of the project in reaching all potential participants was not determined. However, the experience reflected in Table 1 supports a continued emphasis on public information activities in programs of this type. There is also support for the development of special diagnostic procedures at point of admission so that students can receive appropriate assistance before their learning barriers result in academic failure or under-achievement.

Primary Disability Affecting Educability

Information was collected on primary disabling conditions through fall quarter of 1975. At that time 62 percent were considered to have classic learning disabilities based upon the project consultant-planner's diagnostic data. Fourteen percent of the SLD group were seen as having significant secondary educationally handicapping disabilities. Thirty eight percent of those served were non-SLD students. Their educationally handicapping conditions included vision and hearing problems, physical handicaps, speech problems, emotional disturbance, corrections history, behavioral disorders, and cultural deprivation.

Intellectual Patterns and Learning Deficiencies of Participants

Intelligence Test Results. A sample of 23 students was analyzed to determine their mean (group) pattern of intellectual abilities. They were given the Wechsler Adult Intelligence Scales (WAIS) with results reflected in Table 2.

The mean profile was one which is classic for the learning disabled. Overall intelligence was comparable to junior college students in general (full scale IQ - 114.1), while specific deficits were evident in general factual (academic) knowledge, arithmetic reasoning, auditory memory and encoding. Remarkably, the same pattern was in evidence in each of the three school populations, even with small sub-sample sizes (seven, five and eleven). The small sample size and lack of randomness in sampling procedure prevents

confident conclusions about the total population served.

However, the WAIS results are in a direction which is supportive of the effectiveness of referral decisions and project selection criteria. Measures of functional deficits were also used in selection and problem identification.

TABLE 2
WAIS Results of a Sample of 23 SLD
Project Students

	Normandale		Metropolitan		Rochester		Total	
	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>
Information	9.8	6	11.0	5	11.3	12	10.9	23
Comprehension	14.0	7	14.6	5	12.2	12	13.5	24
Arithmetic	10.9	7	12.6	5	11.5	11	11.5	23
Similarities	11.6	6	14.0	5	13.9	11	13.3	22
Digit-Span	9.6	7	9.6	5	10.5	10	10.0	22
Vocabulary	10.0	7	11.8	4	12.0	11	11.4	22
Digit-Symbol	10.7	6	10.8	4	9.7	9	10.7	19
Picture Completion	11.5	6	11.8	4	12.6	10	12.1	20
Block Design	12.3	6	12.5	4	12.5	9	12.5	19
Picture Arrangement	11.8	6	13.0	4	14.8	10	13.5	20
Object Assembly	14.0	6	13.5	4	14.3	9	14.0	19
Verbal IQ	105.0	7	111.4	5	122.8	11	114.9	23
Performance IQ	113.5	6	116.5	4	119.3	9	116.9	19
Full Scale IQ	109.4	7	114.0	5	117.7	11	114.4	23

Specific Learning Deficits Identified

Most students were found to have multiple learning problems. This suggests a need for multiple remedial alternatives with effective diagnostic, program planning and coordination services for the population. The specific deficits are listed below in order of frequency of occurrence (identification):

TABLE 3

Specific Learning Defecits Identified*

Deficit	N	%
Spelling	154	68
Reading	141	62
Writing (grammar, syntax, handwriting)	134	59
Self Concept	117	52
Behavior Management	106	47
Concept formation and sequencing	96	42
Study Skills	89	39
Vocabulary	87	38
Social Perception	85	37
Math	77	34
Speech and Oral Expression	75	33
Comprehension	72	32

* Data for all students receiving diagnostic services during 1975-76.

The problems which occurred most frequently in this population were deficiencies in basic skills (reading,

writing and spelling). These are deficits which would be most readily apparent to instructors and to the students themselves. This leads to speculation that many students may experience other more subtle deficits characteristic of the "learning disabled" but not be identified if they do not also have one of the more manifest deficits as well. These most common deficits (spelling, reading, writing) will create interference with learning where traditional modes of instruction are relied upon. Considerable improvement in learning should be possible for this group with individualized or flexible instructional techniques which would allow them to receive information and demonstrate knowledge in ways in which they are most capable (e.g., oral or visual rather than written). This also points to a need for instructors to focus on the learning and performance process as well as product for optimal results. This supports special programming to develop the SLD student's self-understanding and assertiveness, as well as programming in the form of SLD specialist consultation with instructional staff members.

The general categories of "behavioral management" and "self-concept" include many students with significant emotional problems. Surely, remediation or intervention services by project staff would generally have a positive effect on self-concept and personal and social adjustment, when those services result in improved academic performance. However, in many cases the personal and social problem must be dealt with directly and quickly if the student is to profit

from other services. The most commonly cited deficiency in project services was therapeutic counseling or psychiatric intervention. Community and institutional resources were inadequate to meet this need.

The "learning deficits" data is not available by primary disability. Consequently, Table 3 includes problems of students with primary physical or emotional disabilities, English as a second language, cultural deprivation and economic deprivation. This information on specific deficits is also descriptive only of the students who received significant diagnostic services (73% of the total served).

Services Provided

Project students were seen to have multiple problems and, likewise, most received multiple services. The incidence of services provided is portrayed in Table 4.

Information on services provided was obtained from records in student case files. Seventy-three percent of the population received formal diagnostic services. Program guidance was given to fifty-four percent. In many cases, students were advised concerning their own strategies for learning and interacting with instructors. In some cases, program or course changes were suggested to take advantage of courses, instructors, or experiences which were most compatible with the student's unique learning pattern. Just as often, staff members elected to intervene directly with the student's instructor to promote understanding of the student or to solicit special consideration in teaching or

TABLE 4

Services Provided by Project Staff to Students and Community-Referred Clients

	Students						Community Service						Total	
	Rochester		Normandale		Metro		Rochester		Normandale		Metro			
	N = 92		N = 22		N = 36		N = 37		N = 11		N = 29			
	N	%	N	%	N	%	N	%	N	%	N	%		
Diagnosis	78	84	14	64	32	81	30	81	6	55	29	100	165	73
Program Guidance	56	61	16	73	27	75	27	73	7	64	10	34	123	54
Instruction Intervention	48	52	12	55	22	61	17	46			4	14	103	45
Outside Contact	32	35	8	36	23	64	23	62			13	45	99	44
Groups	43	40	3	14	21	58	3	8			3	10	73	32
Job Placement	42	45	2	9	19	53	5	14			7	24	84	37
Private Tutorial	52	57	13	59	22	61	10	27			9	31	106	47
Small Group Tutorial	29	32	7	32	18	50	6	16			6	21	66	29
Programmed Learning	24	26	8	36	15	42	3	8			2	7	52	23
Behavior Management	29	32	9	40	18	50	4	11			2	7	62	27
Taping			2	9										

evaluation strategies (but not in evaluation standards). The importance staff members assigned to parents and "significant others" to the student's progress is reflected in the substantial number of contacts they made with these individuals (in 45% of all cases).

Private tutoring (47%) and small group tutoring (29%) were provided both by staff members and other students. Peer tutors were found (staff reports) to be very responsive to their tutees in crisis situations, even when considerable time was required. However, they seemed less likely than project staff members to persevere in their tutoring assignments on a long-term basis without substantial positive feedback from their tutees. The total volume of tutoring services was considered to be increased well beyond the staff's capacity as a result of the involvement of peer tutors. Interest, sensitivity and rapport between tutor and tutee were seen by project staff members as being enhanced through the use of LD project clients as tutors.

Many students requested advice on job placement, primarily as they sought part-time and summer jobs.

The reader will note that the frequency with which various services were provided varied between schools. This was seen by the project coordinator to be primarily the result of differences in the availability of similar services in the college, in the community and in feeder secondary school systems. For example, diagnostic services were less frequently provided at Normandale because of their general

availability at the high school level in south-suburban Minneapolis school systems. This suggests to SLD program planners in higher education that a staffing, liaison and service model for a particular school should take into account the potential cooperating agencies in the community and the pattern of existing services.

Referral to Community Resources

Three hundred and ninety-nine referrals were made to community resources in the past project year. The identification of problems and referral for assistance may be a very important function of an SLD program in a college setting. Table 5 indicates the resources utilized most often by the program in each school.

Table 5

Referrals Initiated by Project Staff to Community Resources

	Rochester	Normandale	Metro	Total
Private Community Remedial				
Reading Program	28	10	42	80
State Division of Vocational				
Rehabilitation	18	11	31	60
Project Employment	39	0	13	52
Vocational-Technical Schools	3	7	21	31
State Services for the Blind	*	*	*	34
Developmental Learning Centers	32	0	0	32
Mental Health Services	17	1	12	30
Secondary Level Special				
Education	18	2	8	28
University of Minnesota, 4 yr.	9	1	8	18
Speech Therapy	9	0	7	16
Family Counseling Services	5	0	4	9
Other 2 Year Colleges	5			5
Neurological Exam	3	0	1	4
			Total	399

* Data not available by school

The reader should understand that referral did not always result in services being received by the student. In particular, the eligibility of the learning disabled for services from the State Vocational Rehabilitation agency (34 referrals) is questionable at this time unless they have another documented disability. Thirty-four students were referred for "talking book" services from the state agency for the blind, but their eligibility was often contested. Mental health assistance was often delayed or not available on a timely basis, with the frequent result that no service was received. It would seem desirable for programs of this kind to develop operating agreements with community resource agencies early in their planning or development.

The project staff made 40 referrals for community-based and secondary school assistance in such areas as remedial reading, study skills, tutoring and other educational support services. Many of these were referrals of non-enrolled individuals who were eligible for this assistance, given diagnosis or problem identification. Also, the project used community services to supplement its direct assistance to enrolled students when the program simply could not keep up with the need.

Many students were considered better served by other colleges or vo-tech schools considering their particular learning patterns and their career plans. The counseling departments were normally involved in those cases.

Analysis of Changes in Grade-point Averages and Comparison Of SLD Students with all Students

Participating students' grades were analyzed to determine whether they were as effective as other students in achieving letter grades. They were also evaluated as a group for change in grades over the program year. Improvement in grade-point average (GPA) should be considered an indication of positive program impact. While learning deficits and related problems might always prevent this group, on the average, from achieving at the same level as students in general, special services to students and faculty were expected to cause some movement toward equivalent performance. It was noted earlier in this report that the SLD students' average intelligence was estimated to be comparable to junior college students in general based upon a sample of 23 SLD students.

Original evaluation objectives predicted GPA improvement based upon a pre-post program GPA comparison. This proved unfeasible since most participants entered the program soon after they enrolled in the institution, so that pre-program data did not exist. Most also continued active involvement in the program throughout the year, so that end-of-year GPA data was not really post-program information.

Fall and Spring GPA's of SLD Students

Transcripts of all SLD students active in the program were analyzed to determine average GPA's earned during fall and spring quarters. Improvement is noted in these group

averages, for all schools combined, from 2.60 to 2.74. A .13 decrease in the Metropolitan group is in contrast with a .22 increase in the much larger Rochester SLD group, and a .15 increase at Normandale. While the cause of this overall GPA improvement cannot be isolated, its relationship in time with program involvement is encouraging with respect to the possible impact of those services.

Relationships Between Extent of Program Involvement and GPA

Students who were involved in the program three or more quarters were found to have higher GPA's during spring quarter than students who were involved two quarters or less. Table 6 also shows that those who did not follow through with program services after diagnosis achieved even lower GPA's.

TABLE 6

Spring Quarter GPA's of SLD Students by Extent
of Program Participation

	3 or more quarters		One or two quarters		No follow-up in Program	
	N	GPA	N	GPA	N	GPA
Rochester	50	2.7	23	2.6	12	2.0
Normandale	8	2.7	3	2.0	5	2.1
Metropolitan	11	2.7	6	2.6	2	3.0
TOTAL	69	2.7	32	2.54	19	2.13

SLD Students Compared With All Students

The grade-point average of SLD students might be expected to be lower than other students, particularly at

point of referral when low grades sometimes serve as a warning of special problems or needs. Control groups of 50 students were randomly selected in each school to estimate the overall GPA's in those schools for purposes of comparison with SLD students. Table 7 presents that comparison.

TABLE 7
1975-76 GPA's of All SLD Students and Controls

	End of Fall Quarter Data				End of Spring Quarter
	Fall Quarter Only SLD	Control	Cumulative SLD	Control	Spring Quarter GPA Only SLD
Rochester					
N. Students	82	50	58	50	82
GPA	2.55	2.90	2.62	2.83	2.76
Normandale					
N. Students	10	43	12	46	14
GPA	2.58	2.75	2.32	2.66	2.73
Metropolitan					
N. Students	24	42	26	46	21
GPA	2.81	2.95	2.77	2.97	2.68
All Schools	116	135	96	142	117
N. Students	116	135	96	142	117
GPA	2.60	2.87	2.53	2.82	2.74

Control group GPA information was provided only through fall quarter. Cumulative control group GPA's varied as much between schools (.31) as the overall difference fall quarter between SLD and control students (.29). The .14 increase in SLD student GPA from fall to spring quarters cut by

50 percent the difference between their mean GPA and the fall quarter control group mean. In other words, SLD and control group differences in GPA were reduced by one-half during the program year.

Variation in Course Completion Rates by Academic Department

Variations were observed in course completion rates between departments as well as between schools. These rates varied from 0 to 100 percent as indicated in Table 8.

Many factors undoubtedly influence completion rates including such variables as the nature of the material to be learned, traditional teaching strategies in certain academic areas, and the influence of differences between individual instructors in standards, instructional methods, and flexibility. One would expect higher rates of completion in career track areas such as chemical dependency, law enforcement and nursing as some selection has taken place before enrollment. On the other hand, nearly all students must enroll in an English and a math course, regardless of their career plan. Other factors may be suspected to interfere as, for example, in art where individual project work is often not scheduled for completion by academic quarter. This would increase the number of incompletes due simply to the nature of the course.

Nevertheless, the data in Table 8 (pp. 17-18) may suggest significant areas for concern and attention by the institutions, the department faculties and SLD students and

TABLE 8

Ranking of Academic Units of All Schools by Course Completion
Rates of Project Students*

Rochester				Normandale		Metropolitan			
Rank	Department	Credits Attempted	Percent Completed	Department	Credits Attempted	Percent Completed	Department	Credits Attempted	Percent Completed
1	Law Enforc	28	100						
2				Law Enforc	12	100			
3	Spe & Thea	142	96						
4				Phy ed/Rec.	21	96			
5	Business	305	90						
6	Phy ed/Rec	232	88						
7							Phy ed/Rec	33	88
8				Chem. Dep.	148	86			
9	Sciences	1299	85						
10	Nursing	197	84						
11	PEP	187	83						
12	Languages	109	82						
13							Soc/Anthro	163	81
14	English	892	80						
15	Math/phys	388	80						
16							Art/Music	125	80
17							Spe & Thea	57	79
18	Psych/Phil	365	78						
19	Art/Music	372	78						
20	Humanities	377	77						
21	Soc/Anthro	378	76						
22							COR	92	76

* Courses were considered completed when the student had received a letter grade denoting completion of required work by the end of the quarter of registration.

Table 8 (continued)

Rank	Rochester		Normandale		Metropolitan	
	Department	Credits Attempted Percent Completed	Department	Credits Attempted Percent Completed	Department	Credits Attempted Percent Completed
23			Languages	40 75		
24			Spe & Thea	33 74		
25			DEST	110 73		
26			Soc/Anthro	85 72		
27					Psych/Phil	76 71
28					Sciences	159 70
29					English	261 66
30			Psych/Phil	61 66		
31			Sciences	61 66		
32			Humanities	127 65		
33			Business	68 65		
34	Journalism	90 64				
35					Humanities	134 63
36			English	231 60		
37			Art/Music	78 53		
38	Hotel/Motel	63 51				
39					Business	100 49
40	Technical	25 40				
41			Math/Phys	157 29		
42					Math/Phys	147 27
43			Technical	9 0		

their advocates. For example, the rates of course completion in English at Normandale (60%) and Metropolitan (66%) suggest a substantial barrier to ultimate graduation for many students, since this is a required subject in most cases. Similarly, the impact of success rates of 27 and 29 percent in math and physics (also Metropolitan and Normandale) also identifies a profound stumbling block for many SLD students. These very low rates of success might be due to the incompatibility of those courses with many SLD students' basic skill patterns. They may also be the result of department or instructor practices which do not capitalize upon individual differences in patterns of learning or expression. Attention to this problem would appear to be urgent. Comparison of students and academic unit practices might be productive in isolating the problem since Rochester students do not seem to have similar difficulty completing course work in those academic areas (80% completion rates).

Much of the data on completion rates by department and school clearly cannot be interpreted effectively through superficial observation. However, the results may be useful to students, SLD specialists, teachers and administrators in beginning an inquiry into the factors preventing this group from making normal or optimal progress. These data would seem to suggest that differences between students may not be the only, or even the most significant determinant.

A Comparison of SLD Students and Controls in Course Completion Rates

Table 9 on the next page suggests that there is some relationship between the completion rates of SLD students and students in general in various academic departments. However, wide discrepancies and inconsistencies are evident. The reader can observe that there are very wide discrepancies in some units as, for example, in Journalism, Technical, and Hotel-Motel. This data may also be useful in isolating potentially removable barriers.

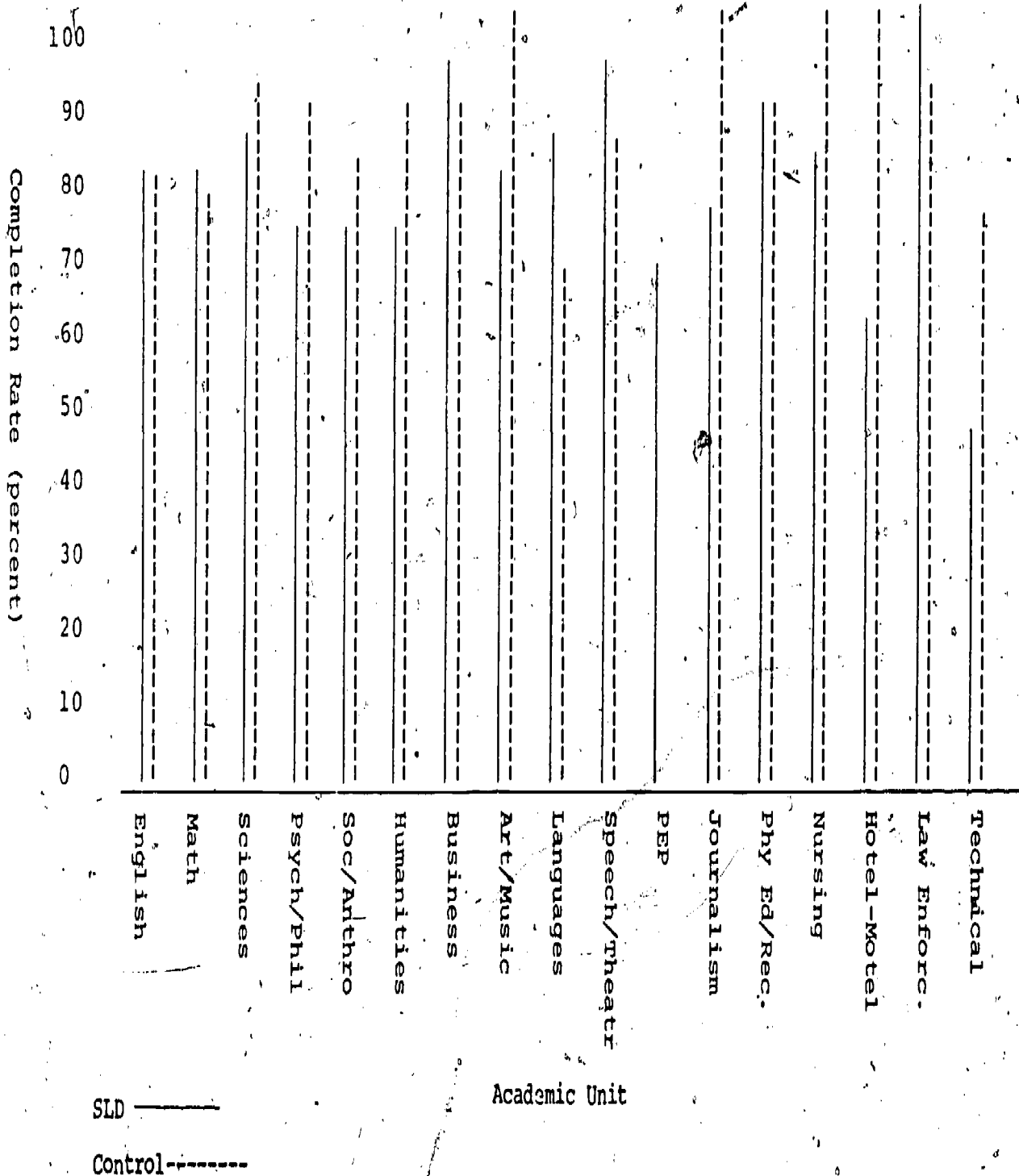
Instructor Suggestions and Awareness of the Program

All instructors in the three schools were surveyed to determine their awareness of the SLD program and its students and to obtain their suggestions for program improvement. A copy of the questionnaire is presented in this report as Appendix C. The rate of response to the survey was not high with 101 or 24 percent of the 420 instructors returning completed questionnaires.

Awareness of the program. A program objective for purposes of evaluation was that 90% of the instructors would, after the final project year, indicate that they are aware of the existence of the SLD project. Eighty-one percent of the survey respondents indicated this awareness. The project did not meet its goals in this area. The general awareness level was similar in each of the schools. In-service training was provided on an organized but

TABLE 9

A Comparison of Course Completion Rates of Control and SLD
Student at Rochester Community College



voluntary group basis at Metropolitan, organized individual basis at Rochester and exclusively through informal contacts at Normandale. The survey results are not supportive of either of these approaches as superior. However, if the program were capable of handling more referrals, a greater effort should be made to publicize the program and its services.

Knowledge of specific program services. Only 46 percent of the respondents were able or willing to identify specific program services when asked, "What services are available to the students through the program?" Clearly, many more referrals might have been received from instructors if the remaining 56 percent were more knowledgeable about the project. The frequency of mention of specific services is presented in Table 10 below.

Table 10
Instructor Survey

Service	N
Remediation and Tutoring	35
Diagnosis	15
Counseling	10
Course Help	10
Taping	6
Alternative Testing (course)	5
Faculty Consultation	3
Other	17

Remediation and tutoring were mentioned 35 times by the 46 respondents to this question. Perhaps this reflects instructor perceptions of the SLD student's primary needs as well as actual services available. Diagnosis was mentioned frequently (15 times) and counseling and "course help" were mentioned by 10 respondents. The "other" category in table 10 includes one or two mentions of each of the following: specific skills, complete services, emotional support, coping strategies, sensitive administration, special classes, special staff, respect, games, attention and referral.

Instructor optimism about SLD student success.

The majority of instructors were optimistic that SLD students, with special help, could succeed in their courses (63%). Considering only those respondents who indicated an awareness of the program, 71% were optimistic about student success. Both figures fall short of the project objective of 80 percent.

Fifteen percent of the instructors responding were unsure about SLD students' capacity to succeed in their courses and 19 percent did not believe they could succeed. Clearly, several instructors who became aware of the program and its services continued to be pessimistic. Some negative comments in the "suggestions" section also indicate that some instructors carry some hostility toward these special students as well as special program services. Their comments

do not, however, give specific reasons for pessimism which relate to the students' capacity to comprehend the subject matter. Many seem ready to reject these students due to their learning difference or basic skill deficiency. It would seem that in-service training must be designed not only to inform instructors but, in some cases, to change attitudes and remove prejudices. It should be re-emphasized that most instructors were optimistic.

Instructor comments on specific SLD students.

Fifty-one percent of the respondents stated that they had one or more SLD students in their classes during the past year and 38 percent believed one or more of those students were in the program. When asked to identify these students' problems ("affecting the student's response to the instructor") most pointed to reading, writing, and "dyslexia." The other problems described were highly varied, including assorted cognitive processing problems, study skills, and personal-social adjustment difficulties.

Suggestions for the SLD program. The instructors were asked for their suggestions for the SLD program. Certain themes were clearly apparent in their ideas as reflected in Table 11. The project may not have reached its full potential in terms of referrals from instructors and potential impact through instructors since the most common need expressed was for more information about the program. Instructors wanted more in-service training and publicity

for themselves, and they want more students to know about the program.

Table 11
Suggestions Instructors Offered
for the SLD Program

Suggestion	N
Increase in-service and program publicity to teachers and students	21
Expand the program	16
Continue the program	11
Better screening of all students for SLD problem identification	10
Exclude SLD students from regular classes until basic skills reach acceptable levels	8
General positive comments about the program and students	5
General negative comments about the program and students	4
Increase staff communication with instructors and follow-up of students	3
Read tests to SLD students	3
Other	8
No suggestions offered	14

Many instructors suggested continuing the program (11) and 16 urged expansion. The latter category included recommendations for increasing the full-time staff, students served, psychological and group work services,

space and materials. Many were concerned about identifying students, perhaps feeling somewhat incapable of spotting the SLD student before severe problems develop. They frequently urged that testing or other diagnostic procedures be used with all entering students to identify SLD students for early referral to a special service program.

Unfortunately, eight instructors suggested that SLD students should not be permitted to enter regular classes until their basic learning problems are remedied. Since many students must develop compensatory learning methods and cannot resolve some of their learning deficits, this would effectively exclude them from higher education entirely. Two instructors expressed clear hostility toward individual tutors they suspected of helping other students "cheat on exams." One was angry about the use of resources for a specific group. Another was upset about SLD students' self-advocacy. In addition to the support evidenced by suggestions to continue or expand the program, five teachers expressed general enthusiasm about the services provided through the project.

SUMMARY

The inferences drawn from the data collected in this study must be seen as tentative. The evaluation design did not provide for formal hypotheses nor tests of significance of results. The absence of reports on, or even the existence

of, similar programs prevented comparative analysis. Therefore, this data must be viewed as ipsative with its predictive value and utility in various settings remaining to be verified through further research and experience.

Conclusions and recommendations based upon this data and staff experience are offered in Part I of the Evaluation Report.

APPENDIX A



ROCHESTER COMMUNITY COLLEGE

ADMINISTRATION BUILDING
ROCHESTER, MINNESOTA 55901
PHONE (507) 288-6101

49

September 13, 1974

Note: All students enrolled in the Special Learning Disability program at Rochester Community College must be evaluated by the SLD personnel and instructors. In order to do a proper evaluation, certain specific psychological and medical information is necessary to proceed in this evaluation.

I hereby give the Rochester Community College SLD program consent to obtain and exchange confidential medical and psychological information with qualified medical, psychiatric and educational personnel and/or institutions relative to:

Full Name of Student

Signature of Parent if Student is a Legal Minor

Parent

Legal Guardian

Other

Age _____

Birthdate of Student _____

Sex (circle one) M F

ENTRY CHART

Return to: Gail Duane
 Office: 441 Plaza West
 Rochester C.C.
 Tele. #: 28

Date _____

Referral Source _____

Counselor _____

Social Security Number _____

1. Student's Name _____ Birth-
 Date _____ Age _____
2. Address _____ Student's
 Phone #: _____
3. Home Address _____ Home Phone: _____
4. Parent's Name _____ Father's Occupation _____
 Mother's Occupation _____
5. No. of Siblings _____ Brothers _____ Sisters _____ School Problems _____
6. If married: Spouse's name _____ Number of children _____ Ages _____
 School Problems _____
7. High School _____ Location _____
8. Extra curricular activities: _____
 Special Program _____
9. Armed Forces: Branch _____ Location _____ Job _____
10. Employment: Name _____ Job Title _____ Dates _____

11. Post Secondary Schools _____ Location _____
 Dates: _____ Program _____
12. Year in School: _____ Credits earned _____ GPA _____
13. Community Agencies and Personnel's Name _____

14. Student's Stated Goals (Career Objective): _____

15. Student's Stated Reason for Referral (Description of Learning Problem): _____

16. Comments: _____

APPLICANT'S STATEMENT

The Applicant must fill out this portion of the application in his or her own words and handwriting as best he or she can. Please fill out this page as completely and frankly as possible.

- I. Please explain your reasons for wanting to attend college. (If necessary, continue on additional paper.)

- II. What are your future plans (after college)? (If necessary, continue on additional paper.)

III. Write a short autobiography. Include educational experiences and relationships to other people. (If necessary, continue on additional paper.)

IV. Please describe the nature of your learning difficulty. (Continue; if necessary, on additional paper.) Include things like problems in classes, etc.

17. Available Test Data: _____

Clinic Evaluation or IQ Tests or Evaluations: _____

I.	Achievement Tests	Date	Examiner & Address	Results

II.	Psychological			

III.	Vocational			

I hereby authorize the above named to release any information from my records to the program director of the SLD program at Normandale Community College.

Applicant's Signature _____

Parent's Signature _____

Dated _____

18. Bases for Admission

53

Criterion	Yes	-	No
		*	
1	---		---
2	---		---
3	---		---
4	---		---
5	---		---
6	---		---
7	---		---

* Asterisk signifies category leading to other: Acceptance _____

19. Referral Source

1. Self-----
2. relative-----
3. student, friend to-----
4. Educational agency-----
- Vo Rehab Agency-----
- Corrections Agency-----
- Remedial Agency-----
- MACLD
5. College Counselor-----
6. College Instructor-----

Outcome

1. Career Objectives

C.O. At ENTRY

Appropriateness

C.O. At EXIT

Appropriateness

2. Accuracy of student's self description

At Entry

At Exit

3. Study Skills

At Entry

At Exit

4. Outcome

A. B.D. at program entry _____

B. Age at program entry _____

C. High School rank _____

D. GPA data

Q1

QGPA _____ QW _____ QI _____

Cum GPA _____ CUM W _____ CUM I _____

Q2

QGPA _____ QW _____ QI _____

Cum GPA _____ CUM W _____ CUM I _____

Q3

QGPA _____ QW _____ QI _____

Cum GPA _____ CUM W _____ CUM I _____

E. Outcomes

1. Graduated yes _____ no _____

2. Transferred 2 yr. _____ 4 yr. _____ Vo-Tech. _____ Other _____

3. Appropriate Employment _____

4. Dropped out of school _____

5. In school--no further need for services _____

6. Other _____

Describe outcomes _____

F. Career Objectives

C.O. at entry _____ appropriateness _____

C.O. at exit _____ appropriateness _____

G. Accuracy of student's self-description

at entry _____ at exit _____

H. Study Skills

55

at entry _____ at exit _____

I. Services provided:

Diagnostic _____

Program Guidance _____

Instructor Intervention _____

Collateral contacts _____

Groups (N) _____

Job Placement _____

Remediation:

Private Tutorial _____

Small Group tut. _____

Programmed learning _____

Behavior Management _____

J. (add later) follow-up data

K. Bases for admission

Criterion	Yes	-	No
1	_____	*	_____
2	_____		_____
3	_____		_____
4	_____		_____
5	_____		_____
6	_____		_____

*Asterisk signifies category leading to acceptance

L. Referral source

1. self _____
2. relative _____
3. student, friend, etc. _____
4. Educational agency _____
- V. Rehab. agency _____
- Corrections agency _____
- Remedial agency _____
5. College counselor _____
- College instructor _____
6. Other _____

Referral source _____

APPENDIX B

TESTS AVAILABLE TO SLD PROJECT SPECIALISTS

Reading and Achievement

Gates-McKillop
 Gray Oral Reading
 Wide Range Achievement Test
 Spache Diagnostic Reading Scales
 Durrell Reading Analysis
 Piat, Peabody Individual Achievement
 Peabody Picture Vocabulary
 English College Entrance Tests
 Bateman's Comprehension
 Boehm Tests of Basic Concepts (Preschool Screening)
 Wide-Range Achievement Vocabulary Test
 Informal Teacher Inventory
 Write-a-Sentence (informal)
 Malcalmeius Metropolitan Achievement Test
 Nelson-Denny
 Roswell Chall Reading

Math

Wide Range Achievement
 Key Math Diagnostic Tests
 Stanford Math Inventory (Diagnostic Math)
 California Algebra Aptitude

Specialized Tests

Bender Visual Motor Test
 ITPA
 Sequencing (informal)
 Frostig Test of Visual Perception
 Observations of Lateral Dominance
 Roswell Chall Auditory Blending
 WAIS--Wechsler Adult Intelligence Survey
 Repetitive Test
 Draw a Three Dimensional Object or Draw a Face (informal)
 Wepman Test of Auditory Discrimination
 Study Skills Inventory

Personality Measures

Edwards Personal Preference
 Omnibus Personality Inventory
 Behavior Rating Scale
 Minnesota Multiphasic Personality Inventory
 Test of Social Insight
 Teacher Effectiveness Rating Scale

APPENDIX C

QUESTIONNAIRE-INSTRUCTIONAL STAFF

Discipline _____

Rochester, Normandale and Metropolitan Community Colleges are ending the evaluation phase of a three year HECC project for Special Learning Disabled adults at the Community College level. We are interested in your views and comments on the students you may have encountered or observed during the past three years.

1. Have you heard of the college program for Special Learning Disabled students (dyslexics, reading, spelling and math learning disabled, minimally brain damaged, perceptually deficient, educationally handicapped, etc.)?

Yes _____

No _____

Comment:

2. What services are available to the students (and subsequently the instructor) through this program?

3. Do you believe that students with learning disabilities can, with supportive services, progress normally through your courses?

Yes _____

No _____

Comments:

4. Did you have any SLD students in your classes last year?

Were any of those students in the college SLD program?

5. Please identify the students problems which affected their response to instructor.

6. Do you have any suggestions for the SLD program in the coming year?

Return to: Gail Duane
P-441
Box 30